

The MINERvA Operations Report

All Experimenters Meeting

Howard Budd, University of Rochester
April 30, 2012





Thanks for the Successful Low Energy Run



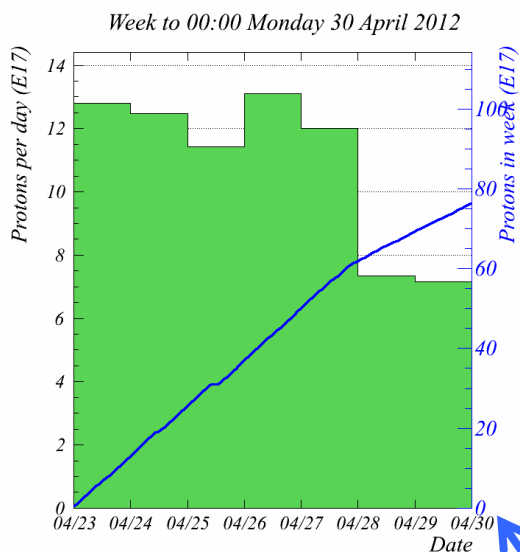
- We thank the Accelerator Division for supplying MINERvA with beam for our low energy physics program.
- We thank the NuMI Target Group for all their hard work investigating targets and solving one problem after another, and for arriving at NT-07 expeditiously
- We thank FESS for designing a new cooling system which has lowered the hall temperature by 10 degrees and has resulted in much higher livetimes
- We thank the MINOS collaboration for working with us in support of the Near Detector
- We thank PPD for all their support, most recently for installing water and helium targets and helping with MINOS Operations



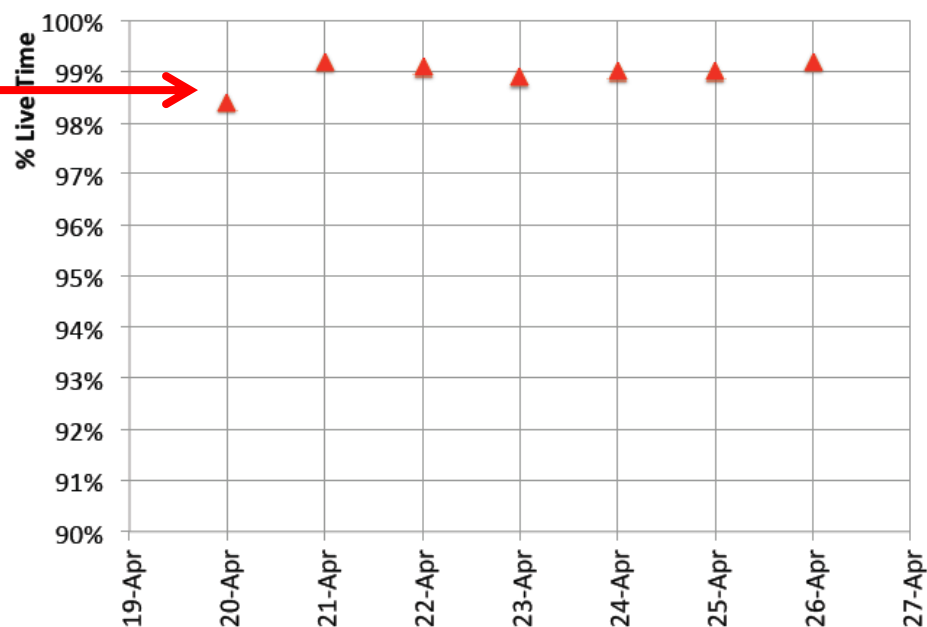
ν Data



From	To	POT	MINOS Live time	MINERvA Live time	Live time
20-Apr-2012	26-Apr-2012	8.86E+18	99.5%	99.0%	98.5%



% live time
Apr 20-26

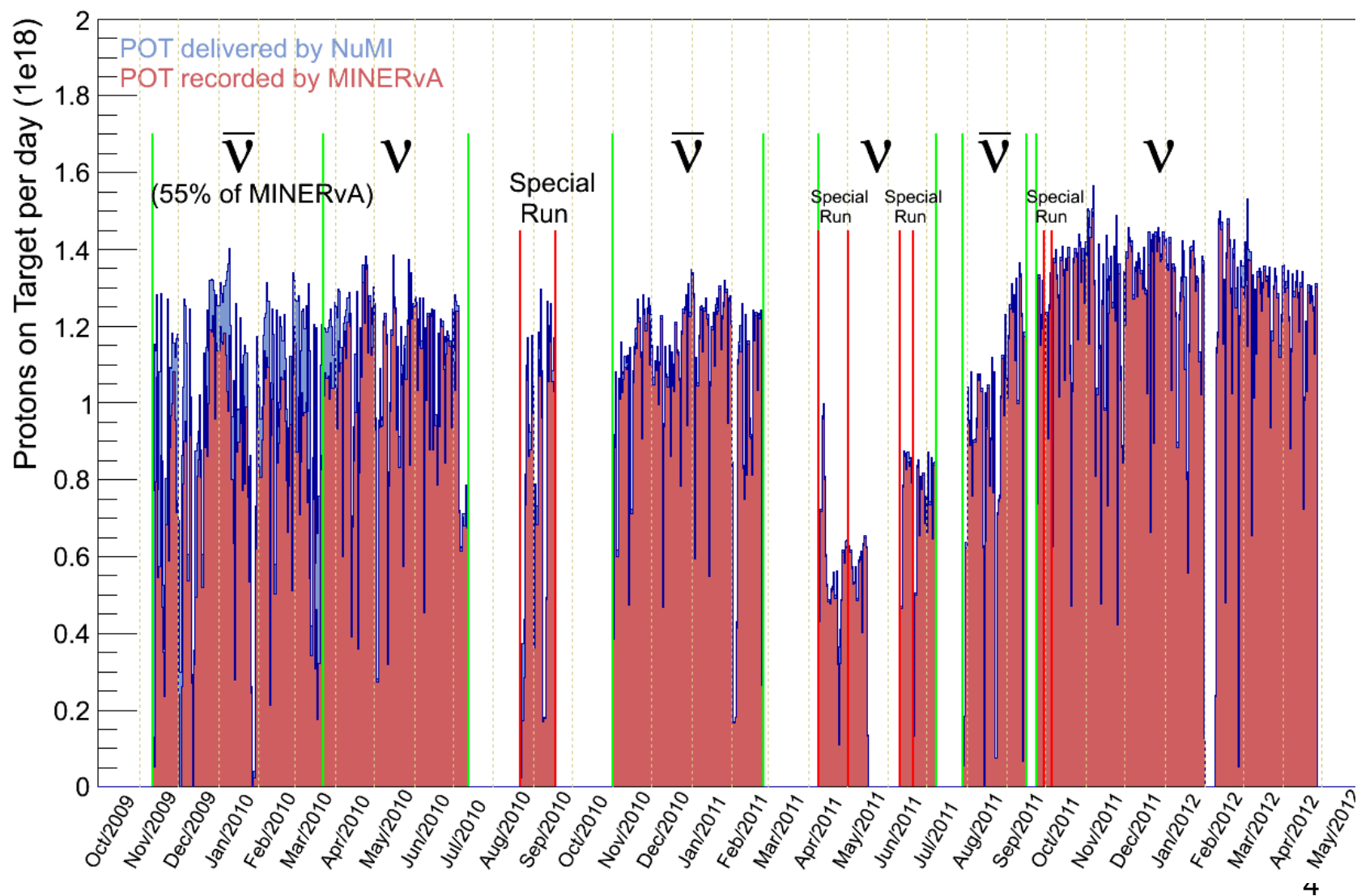


- 26.27×10^{19} POT with NT-07
- 24.97×10^{19} POT for ν , Oct 6 – Apr 29, LE10 with NT-07
- 0.76×10^{19} POT for ν , Apr 23-29



MINERvA POT/Day

Nov 2009 - Present

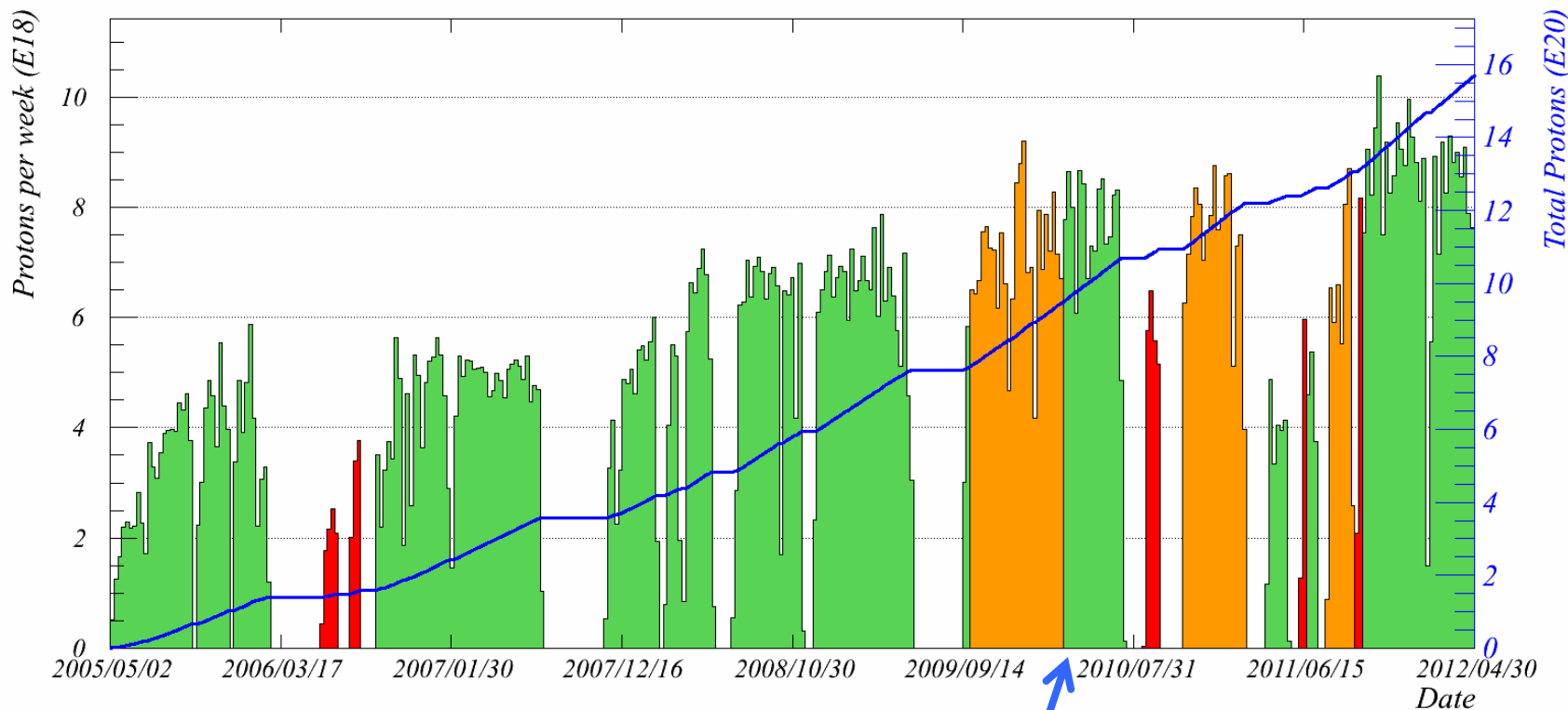




NuMI Protons over History



Total NuMI protons to 00:00 Monday 30 April 2012



157.1×10^{19} POT, Total

62.0×10^{19} POT

Start of MINERvA
Full Detector Run



Totals, POT

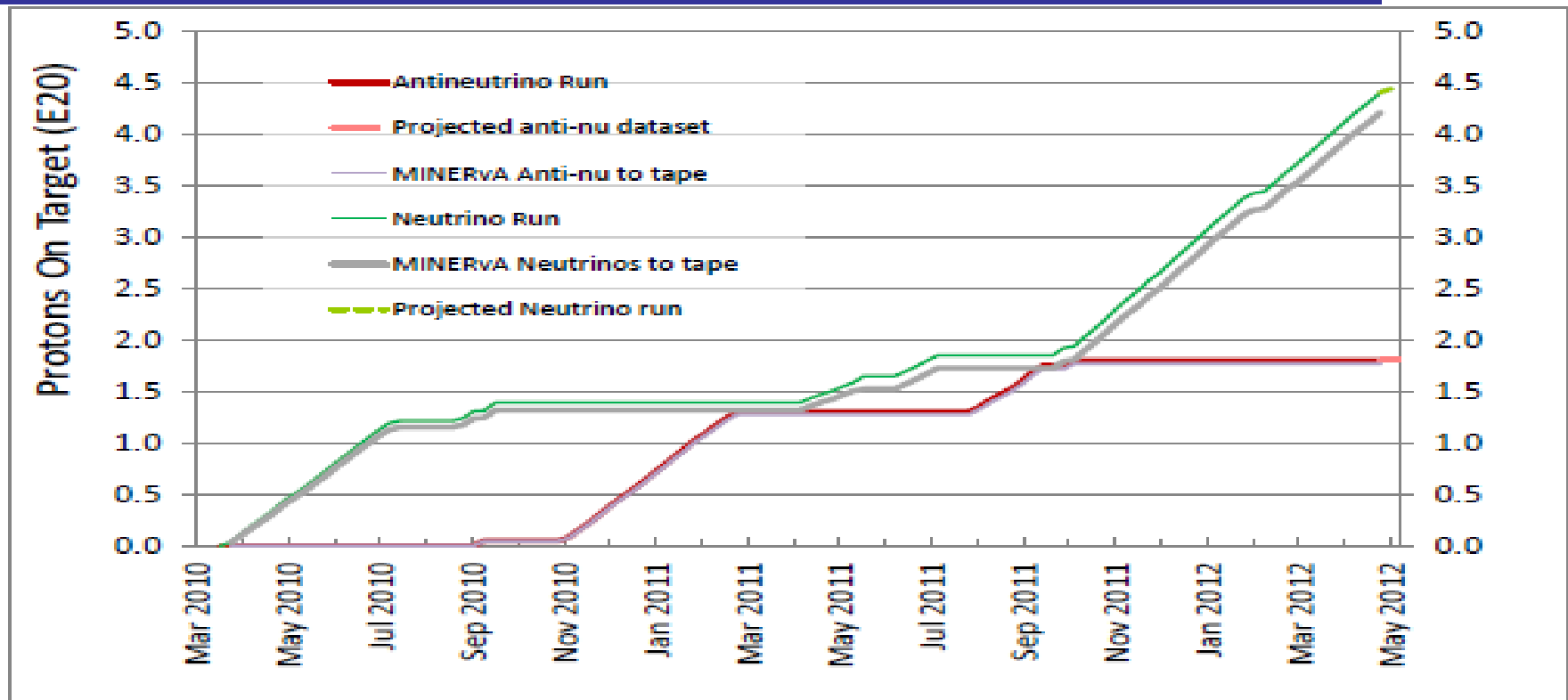


From 3/22/2010	nu	nub	total
nu -LE	3.98E+20		
nu-0 current	7.38E+18		
nu-ME	1.47E+19		
nu-HE	8.15E+18		
nub-LE		1.70E+20	
nub-ME		1.92E+19	
Total Special	3.02E+19	1.92E+19	4.94E+19
total	4.29E+20	1.89E+20	6.18E+20
He Filled	1.90E+20		
He Empty	5.50E+19		
Water Target	1.96E+20		

- For MINERvA
 - 97.1% Live 3/22/10 to now
 - 97.7% live on NT07
- Do not include Aug 23-26 when MINOS was down at the start of NT-04 run.



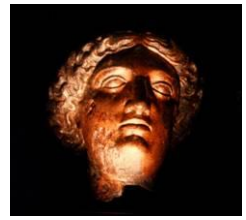
Accumulated POT to Apr 26



- 49×10^{19} POT : number for which MINERvA project & experiment were reviewed & the detector built.
 - Received 43×10^{19} POT in ν mode



Initial Shutdown Plans



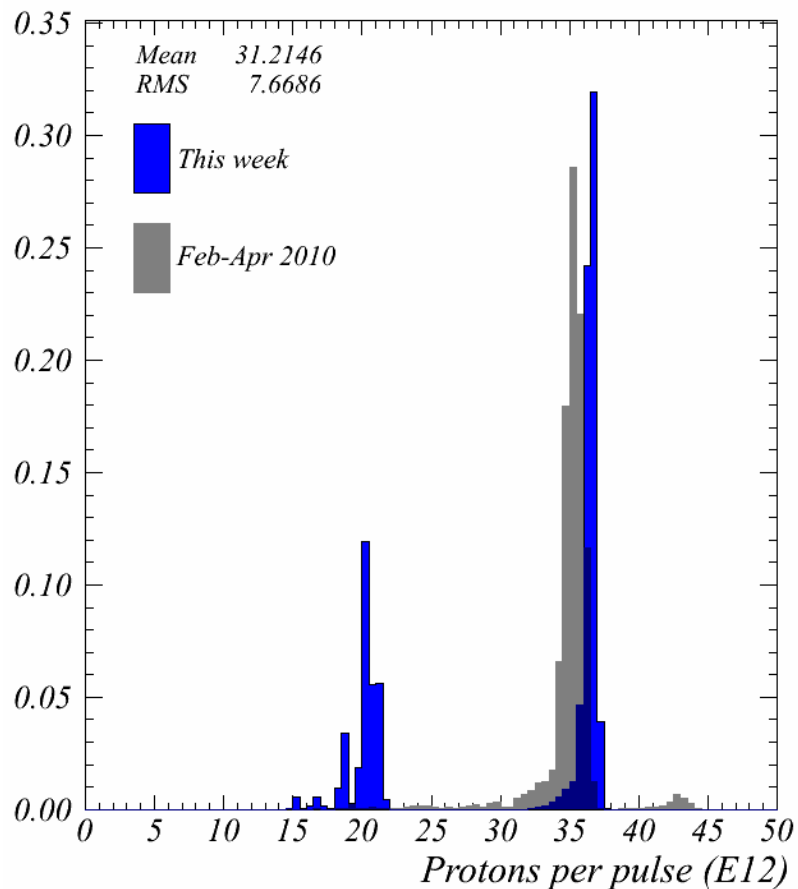
- Replace 3 PMTs with HV varying problem.
- Survey the top of the detector for water deposits.
- Install rock catcher above the detector.



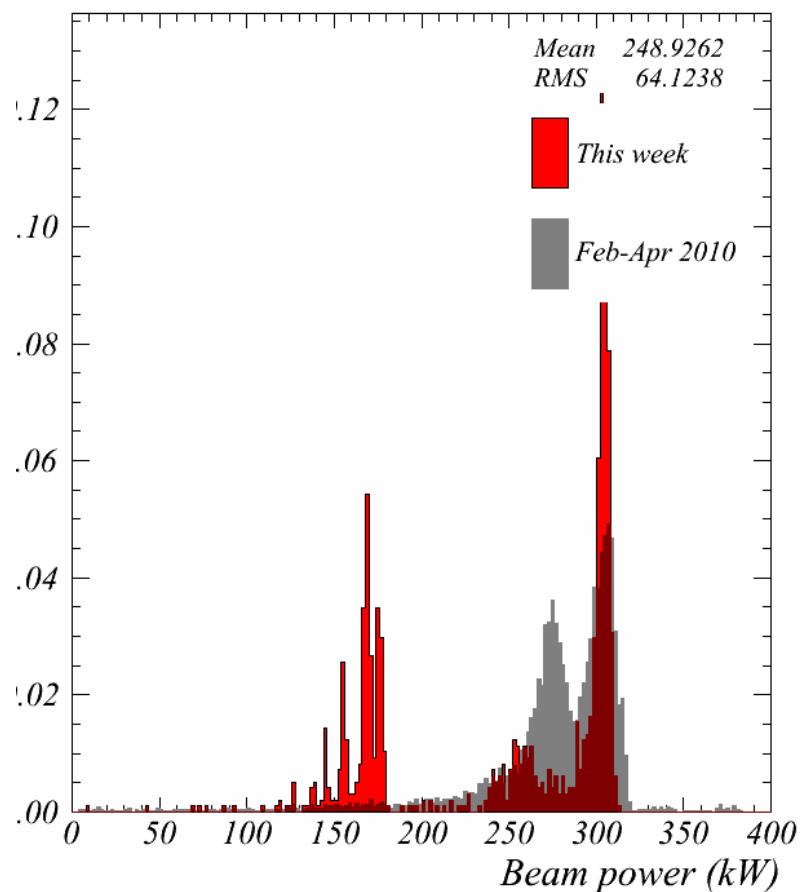
NuMI Beam Plots



Week ending 00:00 Monday 30 April 2012



Week ending 00:00 Monday 30 April 2012

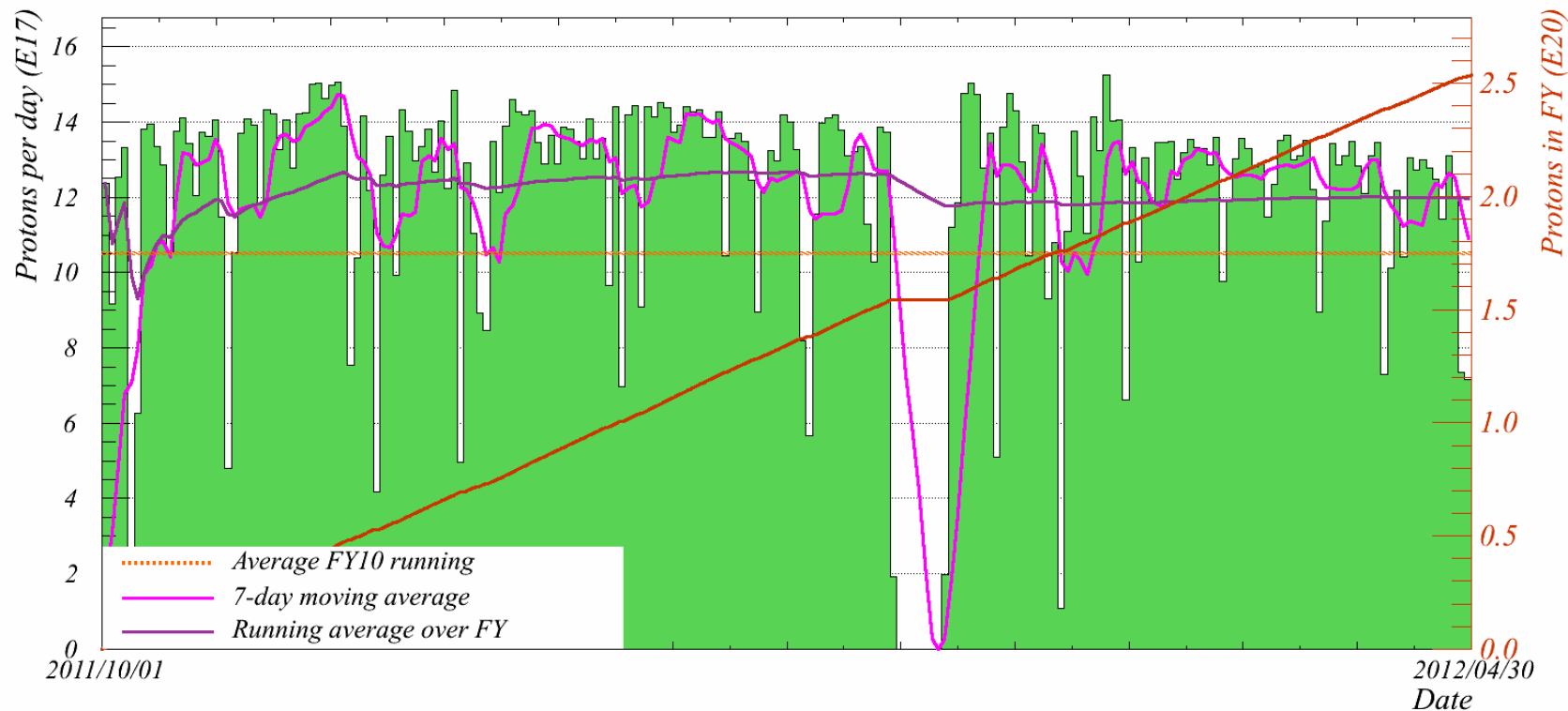




FY2012 Protons



FY12 NuMI protons to 00:00 Monday 30 April 2012



25.46×10^{19} POT

As we complete the end of the Low Energy
run, we are looking forward to the
Medium Energy Run



Photo by Ed Hartouni